

Indiana State Teachers College
Terre Haute, Indiana

UNIVERSITY MICROFILMS
313 NORTH FIRST STREET
ANN ARBOR, MICH.

January, 1959



Volume XXX, Number 4

The Teachers College

JOURNAL

CONTENTS

VOLUME XXX, NUMBER 4

JANUARY, 1959

- | | | |
|----|---|-------------------|
| 55 | THE DISTINGUISHED ALUMNI AWARDS | James C. Farmer |
| 57 | THE TEACHER--HIS TASK; HIS PRIVILEGE | Roxy Lefforge |
| 58 | INDIANA STATE TEACHERS COLLEGE 85th
FOUNDERS DAY ADDRESS--JANUARY 6, 1955 | Wendell W. Wright |
| 61 | THE INDIANA LEGISLATIVE BUREAU AND THE
INDIANA LEGISLATIVE ADVISORY COMMISSION--
A STUDY IN CONFUSION | Hallie Farmer |
| 63 | THE SPOTTED FEVER GROUP OF DISEASES | Herald R. Cox |
| 65 | COAL PRODUCTION | Robert E. Green |
| 67 | FOUNDERS DAY ADDRESS | T. R. Johnston |

The Teachers College Journal seeks to present competent discussions of professional problems in education and toward this end restricts its contributing personnel to those of training and experience in the field. The Journal does not engage in re-publication practice, in belief that previously published material, however creditable, has already been made available to the professional public through its original publication.

Manuscripts concerned with controversial issues are welcome, with the express understanding that all such issues are published without editorial bias or discrimination.

Articles are presented on the authority of their writers, and do not necessarily commit the Journal to points of views so expressed. At all times the Journal reserves the right to refuse publication if in the opinion of the Editorial Board an author has violated standards of professional ethics or journalistic presentation.

RALEIGH W. HOLMSTEDT
President

CHARLES W. HARDAWAY
Editor

DIANE PORTER
Assistant to the Editor

EDITORIAL ASSOCIATES
Olis G. Jamison
Richard E. Thursfield
Jacob E. Cobb

EDITORIAL BOARD
Richard E. Thursfield
Beryl Haynes, Jr.
Olis G. Jamison
Raleigh W. Holmstedt
Ex-officio



JANUARY COVER: Participants in the 1959 Founders Day Convocation. Left to right: Mrs. Carroll E. Roach, State Teachers College Board Member; John D. Ennis, Vice-president, State Teachers Board; T. R. Johnston, Alumnus, I.S.T.C., Director of Information, Purdue University, principal speaker; President Holmstedt; Alumni Association President, Lyman C. Foust; Richard Van Arsdell, 1959 Senior Class President; and Anna M. Redenbarger, 1959 Senior Class Vice-president.

—Photograph courtesy Office of Information Services

THE *Teachers College Journal*

Published October, November, December, January, March, and May by Indiana State Teachers College, Terre Haute, Indiana. Entered as second-class matter October 5, 1931, at the Post Office at Terre Haute, Indiana, under act of August 24, 1912.

The Distinguished Alumni Awards . . .

Alumni and former students are the chief products of an institution of higher learning. The contributions they make to the world by their professional achievements reflect upon the institutions which train them.

The alumni council at Indiana State decided to establish the Distinguished Alumni Award to afford recognition for her outstanding sons and daughters. In 1957, when the first awards were presented on Alumni-Senior Day, a tradition was established. Throughout the years of the existence of this college, many thousands of young people have enrolled in classes and profited from the excellent and wise instruction of the faculty members. These students have gone on to find their places in life, to bring honor and distinction upon themselves and their institution.

It is fitting, therefore, that outstanding former students should be recognized in an official ceremony. Previously, many of these persons were brought back to the campus to deliver addresses on special occasions. But time passed and often what they said was either unrecorded or forgotten. With the establishment of the Distinguished Alumni Award a permanent honor roll was made possible.

The achievements of former students cast the shining light of success upon the college, the faculty, the staff and administration. In return, we acknowledge this distinguished service with a permanent citation.

Those who received the Distinguished Alumni Award in 1958 were:

* * * * *

DR. HERALD REA COX — Dr. Cox was graduated from Indiana State Teachers College in 1928, continued his studies at Johns Hopkins University, receiving his Doctor of Science degree in 1932. He was associated with the Rockefeller Institute for Medical Research, later joining the United States Public Health Service.

In 1942 he became Director of Viral and Rickettsial Research with the Lederle Laboratories, American Cyanamid Company at Pearl River, New York, a position he now holds.

He has received honors and awards from various organizations for his many contributions to scientific research and development and has been cited by the United States government for his outstanding service to military and civilian personnel.

* * * * *

DR. HALLIE FARMER — Dr. Farmer began her long and distinguished teaching career at Muncie, Indiana, after graduating from Indiana State Teachers College in 1916. She received her Masters degree from the University of Wisconsin in 1922 and joined the faculty at Ball State Teachers College.

In 1925 she became Professor of History and Head of the Social Science Division at the State College for Women at Montevallo, Alabama, where she continued until her retirement in 1956. She received her Ph.D. degree from the University of Wisconsin in 1927 and the L.L.D. from Alabama College in 1956.

She is nationally known for her contributions in the American Association of University Women, her articles and books, and her work in the Federation of Business and Professional Women's Clubs.

* * * * *

ROBERT E. GREEN — Mr. Green began his career as a teacher in the Sullivan County Indiana, schools following his graduation in 1933. Within a short time he began to experiment with small business enterprises during his vacation periods and in 1940 entered the contracting business. At that time he organized the Green Construction Company which is one of the major earth moving companies in the United States.

In 1948 the Green Coal Company was formed and is now a sizable mining operation. His Greenmere Farms of 2,500 acres was the home of the Aberdeen Angus herd, from which came the Best Ten Head of Cattle in the International Livestock Exposition in 1947 as well as the Grand Champion which is still regarded as a model for this particular breed of cattle.

In 1953 he was chosen as one of the nation's top six self-made young men by Life Magazine.

* * * * *

DR. ROXY LEFFORGE — Dr. Lefforge was destined to play a major role in Foreign Missions when she began her career as a teacher in the elementary schools of Indiana. She received her Normal Course certificate in 1913 and her degree from Indiana State Teachers College in 1924.

In 1917 she was accepted by the Woman's Foreign Missionary Society of the Methodist Church for work overseas and her first assignment was to Hwa Nan College for Women in Foochow, China. In 1927 she became Head of the Department of Religious Education there and General Secretary of Religious Education for the Methodist Church in China in 1935.

During the war years, when not in internment camps, she continued her work and in 1947 was appointed Head and Executive Dean of the Philippine Christian College, and became President of the Philippine Wesleyan College in 1952.

She is the author of three books and numerous articles. At the present time she is Head of the Departments of Sociology and Psychology at Huntington College.

* * * * *

DR. WENDELL W. WRIGHT — Dr. Wright received his degree from Indiana State Teachers College in 1916 and started his distinguished teaching career in the rural schools of Indiana. His early experience was particularly fitted to the role he was later to play in the educational history of the nation.

He was a rural teacher, city teacher, supervisor, research worker and administrator prior to his appointment to the faculty at Indiana University in 1925.

In his work at the University, he continued his contributions in various areas including membership on the University self-survey committee, directing relationships of returning veterans, membership on the University's administrative committee, head of the inter-institutional committee of the four state colleges and universities, Dean of the School of Education since 1946, and in 1952 he was made a vice-president of the University.

James C. Farmer

Director of Alumni Relations

Indiana State Teachers College



THE 1958 DISTINGUISHED ALUMNI: (l. to r.), Dr. Wendell W. Wright, Dr. Roxy Lefforge, Mr. Robert E. Green, Dr. Hallie Farmer, and Dr. Herald R. Cox.

Editors Note - In this issue of **The Teachers College Journal** we present articles prepared by the recipients of the Distinguished Alumni Award in 1958. As Founders Day is closely associated with alumni activities, we also present the 1959 Founders Day address.

The Teacher - His Task; His Privilege

DR. ROXY LEFFORGE, Head, Department of Sociology and Psychology

Huntington College

Huntington, Indiana

During the years of experience in the teaching profession I have noticed two distinct types of teachers; those who regard their teaching as a task, and those who regard it as a privilege. The former are glad when the day ends and when the pay check is presented at the end of the month. Aside from that, the sooner they get out of the school room the better, and the less contact they have with the students, whether younger or older, the happier they are. For them teaching is not a profession, but simply a means of earning a living.

The other group of teachers works long hours after class both on preparation and in contact with the students who need attention, and strange to relate, most of the time they seem as fresh at the close of the day as they were at the beginning--at least, the student who comes late in the afternoon or evening for help finds just as cheerful a person as the one who came in the morning. Of course, the second group of teachers must earn a living also, but that seems to be secondary while the opportunity for contact with fellow-teachers and students appears to be a rare privilege which is always challenging. Naturally, they are often weary with the tasks of the day, but these tasks are not the outstanding events; they are not the center of interest, and so the radiance of a dynamic personality is the dominant impression one gets from this second type of teacher.

Both types of teachers realize that they have a responsibility to students in the classroom; subject matter must be presented; academic goals must be reached. But are they the dynamic link between the school and the homes of the community? If they regard teaching as a task only, they may resent

the added burden of meeting the needs of the individual children in the classroom or assuming a constructive role in the community. If teaching is a privilege, they will welcome the opportunity to be of help to students beyond minimum requirements and to share in the life of the people among whom they work.

The teacher's philosophy of education will, consciously or unconsciously, become the dominant factor in determining how and with what results even a closely prescribed and directed curriculum will find implementation and integration in the lives of the growing children or older students, who are the potential citizens of that community in the future, if perchance they continue residence there. As one looks back over his own school life, he discovers that certain teachers stand out as having had a powerful influence on his life; others have been entirely forgotten. Why? Perhaps one reason is that the teachers one remembers considered their students as individuals and entered in a friendly way into the interests of their homes, so that what happened in their lives as students was of vital interest and concern to the teachers. Because those teachers made their school work life-centered, for them teaching was a real profession, not just a wage-earning vocation.

The teacher's goal, thus, is twofold: 1) to help the student acquire, through the activities of the school program, the basic tools for living as well as a liberal cultural background through the academic courses, and 2) to enable each student to become as thoroughly an integrated mature person as he is capable of becoming. Their philosophy might be, in part

at least, expressed in the words of Olsen (*School and Community Programs*, 1949, p. 492)

To help the children attain at least minimum adult competence in actual living--as active social beings, members and future founders of families, producers and consumers of economic goods, participating democratic citizens, etc.--through extensive and personally guided personal experience in significant community processes.

For the teacher, whether in elementary, secondary, or college level positions, certain characteristics are essential for the most effective teaching, both in the classroom and in the outreach of the school into the community. The teacher needs to take account of his own personality, making sure that he is master of himself, eliminating those characteristics which antagonize others, and thus make an effort to deal successfully with the members of the community. Slow to pass hasty judgement on either community or predecessors, he will gain the confidence of the school community by honest methods in private and public life. He will avoid peddling petty troubles, keep out of community squables, steer clear of favoritism either of families or students. He will take a businesslike attitude toward school, maintain high moral standards, and keep his actions above reproach, always dignified in personal and social relationships. Remembering that the attitudes that he exhibits and the person he is, leave a lasting impression on his students, he will use fine discretion in all contacts with them. Such a teacher, if he has the corresponding training in

the techniques of his profession, is almost sure to succeed.

Summing up the requisites for the teacher, granted that he is already academically well qualified for the position he holds, who will be able to approach his teaching task as a privilege and an opportunity unequalled for any individual who cares more for others than he does for himself,—the teacher whose life will really count,—let us suggest three basic questions, equally important for public and private school teachers.

1. Have we developed a faith in God, in ourselves, and in our fellowmen? Do we have the kind of stubborn faith in ourselves, our fellowmen, and in God that will enable us to face life intelligently with moral purpose, and believe that good can come out of even our present-day situation (mid-twentieth century)?

2. Do we know how to get along with people—have we learned the secret of co-operation with people of

high ideals and noble purpose? Have we learned to work with others? Whether we like it or not, we have to live with others—at home, at school, in our neighborhoods, our churches, our business or occupational activities. These places are the testing ground, the place where our education in the co-operation with others in the business of living succeeds or fails.

3. Are we living a well-rounded life? That is, have we developed a wholesome devotion to and a sense of responsibility for the community in which we live? The educated person is not a one-sided person, but rather one whose interests reach out to the useful, the beautiful, the true; he is "sure we were meant for something greater than war"; that fellowship among races is better than interracial strife; that fear and want and anxiety are not the suitable background on which the finest character can be developed. Dr. Cabot, formerly of Harvard University, once said that the

really educated person lives by four activities: WORSHIP (his religious and moral life is well developed); WORK (he has a contribution to make and he is not afraid of spending long hours at his work); PLAY (he enjoys the fellowship of others in free, wholesome, creative enjoyment; he knows the joy of relaxation and the thrill of recreation); and LOVE (love for God and love for his fellowmen,—serviceful love that considers one's neighbor, even though he be an enemy, worthy of one's love). Such a teacher has a completeness of life that makes him of real worth to his students and to his school community.

If we who are teachers and administrators of schools can pass the test in real life of these questions posed above, then there is assurance that we can regard teaching as a privilege and an opportunity rather than an arduous task which were better gotten out of the way as soon as possible.

Indiana State Teachers College 85th Founders Day Address January 6, 1955

WENDELL W. WRIGHT, Vice President and Dean
School of Education, Indiana University
Bloomington, Indiana

EDITOR'S NOTE: The 1955 Founders Day Address at Indiana State Teachers College was given by Dr. Wright, but the address was not published at that time. Inasmuch as this issue of the JOURNAL is devoted to Distinguished Alumni and Founders Day activities, it was felt most fitting that Dr. Wright's address be published at this time.

"The inauguration ceremonies attendant upon the opening of the Normal School, having transpired yesterday and the Board having, as a body, attended upon them, the fact is now recorded for future reference and guidance that on this day, the sixth of January, 1870, the Indiana State

Normal School was regularly opened for pupils."

So wrote the Secretary of the Board of Trustees, January 6, 1870, was a cold, raw and bleak day in Terre Haute, so the newspapers say.

The twenty-one students enrolled must have felt the bleakness of the

day. They could not help seeing the unfinished condition of buildings, the muddy campus, and the almost complete absence of materials, library, and equipment as they hovered around the stoves that served as a heating system. There must have been a warmth in their hearts that shook off the coldness of the day and the

richness of purpose that combatted the bleak surroundings. Interestingly, it is noted that out of this first group came the man who was to serve in years to come for a long period of time as the president of this institution, William Wood Parsons.

By any reasonable standard of present-day schooling, most of these students would not *now* be admitted to your college. Not only did most of them not have the equivalent of a high school education, but they were very unsophisticated. Careful research into the life history of these twenty-one students reveals that not one of them had a red convertible, and not one had arrived here by T.W.A. They did not know the meaning of a chip shot to the green or the nineteenth hole. They could not dance the mambo. They had never taken a vitamin pill. I doubt if the girls had heard of the Dior look or used the lipstick that won't kiss off. Not a single member of the faculty had been investigated by the McCarthy Committee. They were, of course, simply the people of their times, just as the freshmen who came this year are the people of our times.

As the students and staff of 1870 wrote that page of history of this school eighty-five years ago, you also write it now. Throughout each of these eighty-five years this institution has written its history.

Today we turn a new page; and I am happy, as one of the sons of Indiana State, to be among those who join with you to write its first few lines. The buildings are now completed. They are beautiful. No longer do you have to huddle about the stove to get warm. You now have thousands upon thousands of volumes in your excellent library. The most modern equipment that is known now serves you in living and learning. Your student body has grown more than a hundred fold, and your highly trained staff stands as giants in learning as compared with those who were here in the beginning. You

come here as students so much better equipped in knowledge and information and skill than those who came eighty-five years ago that comparison would be unfair. You are truly a sophisticated lot.

Interestingly enough, however, if I may quote from your president's Inaugural Address, "We find ourselves in a time that is more fraught with confusion, controversy, doubt, and fear than any other period in the history of the College." Perhaps it is well that we face the fact that it takes as warm a heart today to face such a bleak world as it did eighty-five years ago to face a bleak January day. You who attend here today are realists. You don't want to be kidded about the social climate in which you live. You don't want peace of mind, because you are alive. Only the dead can have peace of mind. But you, like all of us, would like to find a warm stove around which to gather.

In a sense, at least, we can find this warm stove. We can find a rationale of living in a world that seems to want to commit suicide. You and I, as well as the twenty-one who were here eighty-five years ago, can believe in a future.

My basic hope lies in the history of this institution whose birthday we gather to celebrate. Of its eighty-five years, I have known personally half of its history. I was here as a student in some of the golden days of an epoch of this institution. That era—that epoch—can best be described by its staff. To you students the names I mention will mean little, to the alumni they will mean much—Parsons, Wisely, Gillum, Bean, Kelso, Rettger, Stalker, Curry, Turman, Weng, Clippenger, Cox, Hyde, Lauback, Bogardus, Lynch, Rhyon, Switzer, and Moran. All that had come before this time was in the setting of the course, the laying out of the fairways and the building of greens. In the period of which I speak, 1907 to 1917, they played the course with long drives (sometimes in

the rough); their chip shots were good; and on the greens, they putted with deadly accuracy. Those who have come since have played the course with improved clubs, with better swings, and with lower scores but, thank goodness, it's the same course.

I hope I can tell what these men and women gave to me, to my fellow students, and to the educationally growing State of Indiana. I do not wish to speak of their writing, of their research, or of their educational leadership on a state or national basis. This I could do, and such a report would be considerable. But I do want to speak of their scholarship, real scholarship, their teaching!

These scholars of teaching had some beliefs, and they somehow conveyed these beliefs directly or more often indirectly to those of us who were students. In some cases, we did not recognize until years later what they tried to teach us. I think all of us would agree that one can hardly convey to another what he does not have. Perhaps, then, it was most of all what they had, what they were.

They believed fully that young people could develop into something better than they were when they came to this school. They believed in our possibilities. When I think of a certain green, awkward, unprepared country boy who came here in 1911, I would have to say it must have taken great faith—to think he had possibilities. There was no need for green caps for some of us freshmen, anybody would know. Belief in the possibilities of youth, they had it! Somehow they taught us to have that same belief.

They wanted us to learn. Perhaps at times they were a bit insistent about it. But, mostly, they were patient. They knew all about individual differences in rates of learning, even if they did not have intelligence tests. Surely they must have almost despaired at times, but they did not

The Indiana Legislative Bureau and The Indiana Legislative Advisory Commission - A Study in Confusion

DR. HALLIE FARMER

1213 Indiana Avenue

Anderson, Indiana

No agency of state government has suffered more from the increasing complexity of its task than has the legislature. The demands upon it have multiplied through the years. Not only has the quantity of legislation needed increased, but the character of that legislation has changed radically. Laws have ceased to be broad general principles demanding from the legislator only integrity and a fundamental common sense. They have come to require a detailed knowledge in many fields and a wide range of technical information as well. The state legislature which was originally intended to be a body of intelligent amateurs in the business of government is today expected to act as a body of trained experts. But no method has been devised for giving legislators the training of experts.

It is not surprising therefore that legislatures have passed many ill-considered and poorly framed laws. Nor is it surprising that a by-product of poor law-making has been a decline in legislative prestige. Decline in legislative prestige has led in turn to constitutional limitations and restrictions which lead to still poorer legislation. Thus a vicious circle is created which must give serious concern to any sincere student who believes that a strong and effective legislature is an essential agency in democratic government.

The problem is to retain the amateur status of the legislature, thus preserving its representative character and at the same time to supply the necessary information and specialized knowledge which will enable it to act intelligently and effectively.

State legislatures have been aware of this problem for many years. A history of legislative activities in any state would reveal their uncertain gropings toward a solution. Records of legislatures are filled with references to special committees, investigating committees, committees to study and report and committees to recommend and advise. These attempts were unsystematic, badly organized, and lacking in continuity, but they did represent an attempt to meet a real need.

Sometimes the legislature sought expert help outside its own membership. Too often these experts were the people who would be affected favorably or unfavorably by legislative action. At best they were not impartial and at worst they were lobbyists, not too careful in their methods. What the state legislature needed, obviously, was its own expert staff.

Wisconsin made the first attempt to secure an expert staff for its legislature in 1901 when it established the first Legislative Reference Library in the country. This library was designed to do two things. First, to furnish an impartial, expert research staff for members of the state legislature and, second, to supply skilled bill-drafting assistance to legislators.

In 1933 Kansas took a further step toward legislative efficiency by creating a council, comprised of members of the legislature to develop a sound legislative program, and to organize the systematic research and investigation upon which any such program had to be built.

Today in most of the states in the country, the legislature has a Legislative Reference Bureau of experts

in bill-drafting and research, which works in close cooperation with a council of legislators to build a sound legislative program. On the whole, the plan has been as effective as the state legislature has allowed it to be. Where it has been least successful, the weakness has been due to one of two reasons. Either the legislature has not been willing to secure real experts and maintain their impartial and non-political character, or the legislative council has not taken its responsibilities seriously and has failed to do the work assigned to it by law. Sometimes both of these causes have operated to weaken the effectiveness of legislative planning and research.

Indiana moved slowly into legislative investigation and research. If one word could be used to characterize the state's activities in this field that word would be "uncertainty". The history of the Indiana Legislative Bureau (to give it the latest title) illustrates the truth of this statement. The acts affecting the status of this agency beginning in 1907 and extending to 1945 show that the General Assembly has never been clear as to just what the status should be.

In 1907 the first act, designed to give the General Assembly a research staff and a bill-drafting agency, was passed. It created a Legislative Reference Department in the State Library.

In 1913 the name was changed to The Legislative and Administrative Reference Bureau and a separate board was created to supervise it. Although the Legislative and Administrative Reference Bureau was in part at least a legislative agency, the

cause us to despair. By some strange process we caught the spirit of wanting to learn.

There were differences of opinion, of ideas, of theories, of points of view in the faculty. This disturbed some of our immature minds. How could all the gods be right and still disagree? Sometimes we asked about this. We learned from them that people could differ, even sharply, and continue to respect each other. Perhaps peaceful co-existence is not a new thought in the realm of ideas. At least they left us with that philosophy.

All of us, from youth to old age, would like so much to get matters settled, completed, so that we would not have to change our thinking all the time. One day as I watched Dr. Hyde working with the fruit flies in his basement laboratory, he talked of research in heredity. In his slow, drawling way he talked of how little we knew about heredity and discussed some ideas he had about what might develop with further study and research. I had learned the laws of heredity; he had taught them to me. Now he was upsetting them. Perhaps that afternoon I learned that truth is only what we know today and truth tomorrow will be what we know then. Even truth constantly changes—the only thing we can be sure of is that even truth is never final or fixed.

The next morning I went to Stalker's class. Is History and Philosophy of Education; or was it Stalker's class in Stalker? He began the class with:

Flower in the crannied wall
I pluck you out of the crannies,
I hold you here, root and all, in
my hand,
Little flower—but if I could understand
What you are, root and all, and
all in all,
I should know what God and
man is.

Again, we found that truth and understanding took on another char-

acteristic. Not one fact alone is truth, but each bit of truth must be understood as it relates to all other parts. Social, economic, political, spiritual life was a part of the whole truth in understanding public education.

They believed that teaching, helping children and youth toward maturity, was a great calling. There was something proud about them. There were no slurs uttered inside these walls about the work of teaching. I am sure they did not have daily acclaim from the people in their community, yet there was a nobility within them that might well have come from royal birth. *I am a school teacher*, might well have meant to them. *I am one of God's chosen people*.

One summer evening, one of those evenings when all the stars seem to hang down from the sky, a daddy and his little girl were in the backyard. The little girl said to her daddy, "Hold me up high." Her daddy did. She stretched her little arms up toward the stars. She said, "Daddy, I can nearly reach the stars; and when I grow up big, I can touch the stars. Can't I, Daddy?" Her daddy said, "Yes, you can," because her daddy, many years ago, had men and women in this school who had taught him that hope and ambitions were to be encouraged because so many people everywhere have done so much they wanted to do in life.

Today, as we write the first line on the new page in your eighty-fifth year, let one who looks back over nearly half of those years reassure you that, while this day in this world climate may seem to many a bleak and cold one, the development of a good and of a peaceful world today is like the buildings of eighty-five years ago on this campus, unfinished and unfurnished. We will have to do our share in building and furnishing it. Now, with distinctive leadership and a much greater faculty and student body, the college carries on with more expertness today than

the golden era I knew here, but with the same great spirit it displayed in that era. To you seniors may I say, I cannot worry about your future. If you would contribute to the needs of this day, *be a school teacher and be proud of it*. Believe in the possibility of human development of any people, of any race, or creed anywhere in the world. Believe in human reasonableness of the co-existence of differences of opinion without condemnation of those who differ with you. Believe that truth is a growing and changing concept and not a static rule. Be patient with those of us who learn slowly. Do not despair with anyone. Despair is the cause of depravity. Be sure that those who reach for the stars will someday touch them.

With these beliefs, with this pride, with this faith, with this patience, and with this understanding—you can live in security in a bleak and cold world.

I know you will indulge me in being personal for just a word or two. I feel so at home with you here today. I have known this institution professionally, personally, and affectionately for more than forty years. I got much of my personal and professional philosophy of life here. I have been closely associated with your staff for more than twenty-five years. Some of them have been my students. We have found that the portage from the institution on the banks of the Jordan to this one on the banks of the Wabash is easily made. Your last two presidents, Dr. Tirey and Dr. Holmstedt, I count as two of my warmest personal friends. Between them, they have taught me whatever I know of school administration. As the years pass so rapidly and the shadows lengthen, one finds a few things, and sometimes only a few, that become increasingly treasured. You—Indiana State Teachers College, the faculty, the students, the alumni, and the memories—you are my rosary. Thank you for allowing me an opportunity to tell you this on your happy birthday.

Commission and the Bureau is the Bureau director who serves as secretary to the Commission.

It must be confessed that the activities of the Indiana Legislative Advisory Commission were slight indeed. The Commission was to meet on call of the chairman. The chairman rarely called and the meetings of the Commission were so infrequent as to be of little practical use.

In 1957, however, the Commission took on new life. It held regular meetings. It exercised the authority given it in the 1945 act to set up subcommittees composed of members of the General Assembly to study problems which might come before the 1959 session. Twenty-five of these committees were appointed. Their reports were submitted to the Advisory Commission, which had them com-

piled and printed. They were put into the hands of the elected members of the General Assembly early in December. Along with the informational report went drafts of bills designed to enact into law the recommendations of the committee.

Even a casual examination of this report shows the tremendous amount of work which has gone into its preparation. Probably no General Assembly in Indiana's history has come to the opening day of its sessions with such a wealth of information at its command, as will the current session.

It will be interesting to watch the development of the Indiana Legislative Advisory Commission. Will the General Assembly appreciate its work? What influence, if any, will these reports have on the actions of

the General Assembly? Is this report a one-time effort, or will it become an accepted part of legislative procedure in Indiana? How will the shift of parties in the Assembly affect this pattern? How will relations between the Indiana Legislative Bureau, an independent agency, and the Indiana Legislative Commission, a legislative agency, develop? Will these relationships be more clearly defined by law, or will they continue to be worked out in the informal fashion in which they seem to function at present?

Only time can answer these questions. Certainly the current session of the General Assembly has an opportunity to take a long step forward in providing itself with efficient tools for legislative planning and research if it desires to do so.

The Spotted Fever Group of Diseases

HERALD R. COX,* A.B., Sc.D., Director of Viral and Rickettsial Research

Lederle Laboratories, American Cyanamid Co.

Pearl River, N. Y.

The spotted-fever group of diseases includes, in addition to Rocky Mountain spotted fever of the United States and Canada, apparently identical infections in Mexico, Panama, Columbia and Brazil, as well as other tick- or mite-borne diseases such as tick-borne typhus (boutonneuse fever) of the Mediterranean regions of Europe, Africa and the Crimea; identical or closely related tick-borne infections of all parts of Africa; Queensland tick typhus of Australia; rickettsialpox, maculatum disease, and the tick-borne rickettsioses of India (Indian tick typhus) and the Soviet Union (Siberian tick typhus).

*Dr. Cox is author of two chapters, entitled **Colorado Tick Fever** and **The Spotted Fever Group**, in the medical textbook, **Viral and Rickettsial Infections of Man** (3rd edition), edited by Thomas M. Rivers and Frank L. Horsfall, Jr., recently published by J. B. Lippincott Co.

Rocky Mountain Spotted Fever

Rocky Mountain spotted fever is an acute, endemic, infectious disease recognized as one of the most severe of all infections. Essentially it is a generalized intracellular infection of the small peripheral blood vessels caused by an agent called *Rickettsia rickettsii*. The only known method of natural transmission of the disease to animals or man is through the medium of infected ticks.

Clinical Picture

Rocky Mountain spotted fever resembles louse-borne typhus (epidemic typhus) in many of its aspects, the chief differences being the duration of fever, the severity of the disease, and the time of appearance and location of the rash. Attacks range from mild ambulatory and abortive forms to rapidly terminating fatal infections. The fatality rate varies in different

regions and for different ages. In vaccinated persons and young children, attacks are frequently mild and atypical.

In nonvaccinated adults the incubation period of the disease is usually 4 to 8 days, but may show extremes of 2 to 12 days. Early manifestations are listlessness, malaise, headache, loss of appetite and sensations of chilling. Onset of the disease generally is abrupt and comes as a rule in the late afternoon or early evening. Symptoms are a definite chill, pronounced headache, severe aches and pains in muscles, bones and joints, profound prostration, and a rapidly rising fever that continues to mount into the second week. As the disease progresses mental confusion, restlessness, dulling of the senses and lethargy progressing to coma may be noted.

Board of Control created by the act consisted of the Governor, the State Librarian, the President of Indiana University, the President of Purdue University, and one additional member appointed by the Governor. Only by grace of the Governor would the General Assembly be represented on the Board of Control of the Legislative and Administrative Reference Bureau. This situation lasted for 12 years when the Bureau was taken from under the separate board and again made a division of the Indiana Library and Historical Department. In 1939 the status of the Bureau was changed once more. It is under this act that the Bureau functions today. The act provides that the Indiana Legislative Bureau shall be "an independent agency of the state." This phrase appears for the first time in the 1939 law. It distinguishes the Indiana Legislative Bureau from those in other states. It gives this Bureau a degree of independence which is not found in states where the Legislative Reference Bureau is under the supervision of a Legislative Council. The Bureau is free to set up its own problems for research and investigation. Its activities are determined by the director and not by the General Assembly.

There are, of course, limitations on the independence of this agency as there are on those of any state agency. The director is appointed by the Governor, but he may be removed by a vote of a majority of the members elected to each house of the General Assembly. This is a most difficult method of removal. However, it is a limitation of sorts on the independence of the Bureau. Another limitation is financial. The budget of the Bureau is fixed by the Budget Committee and the General Assembly as is the budget of any state agency. However, the salary of the Director is determined by the Legislative Advisory Commission, not by the Budget Committee.

This very brief summary of the laws under which the Indiana Legislative Bureau has functioned shows

that the General Assembly has never had any clear conception of what the Legislative Bureau is, and how it wants it to function. Should the Indiana Legislative Bureau be an independent state agency, as it is at present, or should it be an agency of the General Assembly? Should it have an independent Board of Control, should it be a part of some other state agency, or should it have a supervising council from the General Assembly? Until the General Assembly answers these questions the Legislative Bureau cannot be expected to be as effective as it ought to be. If the General Assembly wants a strong and effective Legislative Bureau it ought to say so.

In 1945 the General Assembly passed an act creating a Joint Legislative Advisory Commission. This act probably represented the first faint stirrings of a desire on the part of the General Assembly for some share in determining the activities of the Legislative Bureau. If this was the purpose of the General Assembly it certainly did not make its purpose clear. It would be hard to find a worse example of bill-drafting than this act provides. As a matter of fact, it does not seem to have been drafted at all. Certain sections were inserted in the 1939 act without any attempt to reconcile contradictions between the new sections and the old ones.

Section 1 of the act is copied from the 1939 act and retains the Indiana Legislative Bureau as "an independent agency of the state government." Section 2 creates the Legislative Advisory Committee to "act in an advisory capacity to the bureau". Section 6 provides that the Legislative Advisory Committee shall "instruct" (not advise) "the director of the bureau as to what research and investigation shall be made by the bureau". The act further provides that the commission "shall advise the director as to the employment of such assistants and research agencies as it may deem desirable" (Sec. 6). In Section 8 it is stated that the director must have the approval of the

chairman of the committee to appoint the staff of the Bureau. He must also, according to the same section, have the approval of the chairman of the Commission to fix the compensation of the staff.

At no place in the act is any attempt made to reconcile the status of the Bureau as an independent agency with the provision in the act for supervision of the Bureau by the Legislative Advisory Commission.

An examination of the duties of the two agencies as provided in the 1945 act shows even more confusion. The Legislative Bureau has bill drafting for one of its duties (Sec. 3); although the Commission may submit drafts of legislation to the General Assembly (Sec. 7). The Bureau is to "provide impartial and accurate information" and "make studies" (Sec. 8). The Legislative Advisory Commission is to "collect information" and "make studies" (Sec. 6).

As often happens in government, the actual confusion in the functioning of these two agencies is less than the law would lead one to expect. Government agencies must learn to live together no matter how difficult laws make it for them to do so. The Legislative Bureau and the Legislative Advisory Commission on the surface at least have established an amicable relationship. The director of the Bureau functioning as the secretary of the Commission carries responsibility for compiling and editing Commission reports. Much of the bill-drafting for the Commission is done by the Bureau.

In contrast to the Legislative Bureau the status of the Legislative Advisory Commission is quite clear. It is an agency of the General Assembly. The president of the Senate is the Chairman of the Commission; the Speaker of the House of Representatives is an ex officio member of the Commission and the three members of the Commission from each house are appointed by the presiding officers. The Commission is bi-partisan. The connecting link between the

fishermen, campers and tourists. A relatively small percentage of western cases occurs in city dwellers because *D. andersoni* generally is found only in areas removed from human habitation and ordinarily does not infest domestic animals. In the east, on the other hand, a high percentage of infections occurs among children and women. The probable reason for this, at least in part, is the fact that the vector in the east, *D. variabilis*, commonly infests dogs that are household pets.

Virulence of the infection varies with the locality and in a given area is correlated with the maximum level of virulence of the rickettsial strain in the local tick population. In the Bitter Root Valley of western Montana, where the author first studied Rocky Mountain spotted fever, the death rate averages about 80 per cent for nonvaccinated adults and about 37½ per cent for children.

Control Measures

The best safeguard is avoidance of areas known to be tick-infested. When this is not possible, spotted fever still can be prevented if proper measures are taken.

Anyone who must venture into an infested area, or into a potentially dangerous area, should use tick repellents, wear clothing that will minimize the possibility of tick-bites, and remove promptly any ticks that may attach themselves. Camp sites should not be located where small animals are numerous, since ticks would be more numerous there. A tick-repellent

such as N-butylacetanilide solution should be distributed throughout the outer garments. Clothing should completely cover the body, with shirttail tucked inside trousers, and high boots, leggings or heavy socks worn outside trouser legs. If one spends much time in tick-infested country, some ticks are bound to reach the body despite precautions. However ticks seldom attach themselves to the skin immediately and usually transmit infection only after feeding for several hours, so that removing and searching clothing for ticks twice a day should suffice to prevent infection.

Attached ticks should be removed immediately by grasping the tick body with small forceps, gloved fingers or a piece of paper held between the fingers and pulling gently. The use of bare fingers would risk contamination with rickettsiae. Twisting the tick or pulling it forcibly would risk breaking it, leaving its mouthparts embedded in the skin. After removal of the tick, the wound should be treated with an antiseptic solution such as iodine. There is no way of distinguishing the bite of an infected tick from that of a noninfected one.

Vaccination is an effective prophylactic measure. Degree and duration of immunity vary with the individual, and with the virulence of regional strains of the disease. Usually the vaccine affords complete protection against relatively mild strains, and for children, against even highly fatal types. Against such strains adults are only occasionally fully protected, but the degree of protection is sufficient

to modify the severity of the disease and to ensure recovery in practically all cases. Vaccination is of no value after onset of illness, and its value after infection with the disease is questionable.

Two types of vaccine are available. One, made from tissues of infected ticks, is prepared and distributed by the Rocky Mountain Laboratory of the United States Public Health Service at Hamilton, Montana. A second type of vaccine, developed by the author, is prepared from rickettsiae grown in the yolk-sac tissue of fertile hen's eggs and is produced by certain commercial manufacturers of biologics.

All evidence from animal experiments and from use in human beings indicates that the yolk-sac and the tick vaccines stimulates the same degree of immunity. Individuals sensitive to chick or egg proteins should receive the tick-tissue vaccine. Vaccination should take place in the winter or early spring, before the tick season, and should be repeated annually since maximum protection is retained less than a year.

Despite some belief to the contrary, the advent of antibiotics has not obviated the need for vaccination, particularly by persons exposed to more than ordinary risk. Spotted fever has proved fatal to unvaccinated persons who were not treated with antibiotics until late in the course of the disease. Therefore, where the incidence of spotted fever is high, preventive as well as therapeutic measures should be taken.

Coal Production*

ROBERT E. GREEN, Owner
Green Construction Company
Oaktown, Indiana

Bituminous coal production in the United States in 1957 amounted to 490 million tons. This was about 2% less than in 1956 which was caused by industrial cut-backs. The 1957

production was about 100 million tons above post war low. The present production is a mark of the coal industry's vigor in meeting the competition of other fuels, in modernizing

its facilities and turning out a better prepared product.

The bituminous coal industry has spent heavily on its own future. By heavy capital investment in costly new equipment, it has so greatly raised its efficiency that the price of coal at the mine has remained stable for

*Statistics furnished by the National Coal Association.

A distinctive rash appears, usually on the second to fourth day of the disease, but sometimes delayed until the fifth or sixth day. The rash may resemble the slight mottling seen in early measles. It first appears on ankles and wrists, and spreads rapidly to legs, arms and chest. Lesions are more pronounced on the extremities. The palms and soles, and at times even the face and scalp, may be involved. Extension of the rash usually is completed and the entire body covered within two or three days. In severe cases lesions become confluent, deep red or purplish in color and often necrotic. Masses of such areas may involve the entire body. Most tragically afflicted is the individual in whom terminal gangrene develops, with sloughing of dependent body parts.

With recovery the eruption gradually fades. The more severe the disease, the longer is the recovery process. In some patients the acute changes caused by the disease clear up with convalescence, but in others the residual persists for more than a year and may be considered permanent.

Host Range

Man is entirely an incidental victim to spotted fever and is in no way responsible for maintenance of the infection in nature. This is due primarily to ticks and the animals on which they feed. In North America all evidence indicates that certain small rodents serve as hosts to the immature stages of the tick vectors. In the eastern United States, Mexico and Brazil dogs also are implicated. Animals that serve as hosts to the Rocky Mountain wood-tick (*Dermacentor andersoni*) and are believed to be responsible for maintaining Rocky Mountain spotted fever are the tree squirrel, ground squirrel, snow-shoe rabbit, jack rabbit, cottontail rabbit, porcupine, chipmunk, pack rat, wood rat, meadow mouse, deer mouse, weasel, marmot and dog.

A feature of Rocky Mountain spotted fever that cannot be emphasized too strongly is its exact duplicability in experimental animals, particularly

guinea pigs and monkeys. To date all attempts to cultivate the causative agent, *R. rickettsii*, on artificial or cell-free media, commonly used for the cultivation of bacterial organisms, have been unsuccessful, but it grows readily in tissue cultures and in the chorioallantois and the yolk-sac of the developing chicken embryo.

The yolk-sac method for cultivation of all the rickettsial agents (members of the spotted fever, scrub typhus, typhus fever and Q fever groups) was developed by the author (Cox) in 1938. This method has been widely used in the production of both diagnostic reagents and of prophylactic vaccines that induce protection against these diseases.

Diagnosis

Despite the commonly expressed opinion that spotted fever is an easily recognized infection, even those familiar with the disease can diagnose it incorrectly. Both the very mild and the rapidly fulminating types are quite difficult to diagnose clinically. In areas where both spotted fever and murine (endemic) typhus are present, their marked clinical similarity poses a further diagnostic problem.

Rocky Mountain spotted fever should be suspected in cases of febrile disease occurring during the tick season in persons whose occupation or habits expose them to ticks. Close examination may disclose the presence of a tick or of an indurated area representing the site of a tick-bite. Even in typical cases differential diagnosis without laboratory aid is most difficult, since it entails consideration of certain exanthematous diseases, as well as other rickettsial and tick-borne diseases. The rash of Rocky Mountain spotted fever may resemble that of measles, meningococcal meningitis, scarlet fever, typhoid fever, septicemic conditions and certain drug rashes. Measles is the disease most frequently confused with spotted fever.

Treatment

At one time good nursing care and

symptomatic treatments were all that was available to cases of spotted fever. Many specific treatments were tried without evidence of benefit: metaphen, sulfanilamide, sulfapyridine, penicillin and streptomycin. Now, however, the problem of treatment for spotted fever and for all other rickettsial diseases has been essentially solved. At least three antibiotics now available—chlortetracycline (Aurcomycin), chloramphenicol and oxytetracycline—have been proved of great value in these diseases. In addition tetracycline (Achromycin) has been used effectively in the treatment of epidemic typhus fever, and there is every reason to believe that it would be equally effective against diseases of the spotted-fever group.

Epidemiology

Although a case was reported in Indiana in 1925, spotted fever was believed until 1930 to be confined to the northwest mountainous portions of the United States. Subsequently the disease has been reported from 46 states, with Maine and Vermont the exceptions, and also has been recognized in Canada, Mexico, Brazil, Panama, Columbia and possibly Venezuela.

In the western states most cases are reported in April, May and early June, the season of prevalence of the Rocky Mountain wood-tick. The danger period may extend into the summer in such higher altitudes as Wyoming and Colorado. Occasional cases have been reported in late summer, fall, and even winter months. In the east most cases occur during the summer, the season of greatest activity of the American dog-tick, *Dermacentor variabilis*.

Most cases in the west occur in adult males who through vocational pursuits are exposed to tick-bites. In greatest danger are those living in live-stock range areas, and particularly those who handle sheep. Other endangered groups are forest service personnel, highway construction workers, railroad section-hands, prospectors, miners, trappers, hunters.

This vast and complex system for producing America's basic fuel has served the nation well in peace and war. In two World Wars coal has proven to be the only fuel which can fill the nation's defense needs without domestic shortages. In these two

struggles and the Korean War the industry produced five billion tons for the war effort and the home front. But it is impractical to stockpile coal for a national emergency, and the coal industry cannot survive on a standby basis. It must produce to live.

Only by orderly, healthy growth can the coal industry meet the demands of a national emergency, or even the demands of energy-hungry industry. It is essential to the welfare of the nation that coal be provided a climate in which it can grow.

Founders Day Address

Indiana State Teachers College, January 7, 1959

T. R. JOHNSTON, Director of Information

Purdue University

Lafayette, Indiana

It is a source of deep personal satisfaction to me to be invited back to Indiana State Teachers College to deliver the 89th Founders Day address today. It should be a matter of pride with the alumnus of any college or university to be accorded this honor and I want to express my gratitude now to my good friends Dr. Raleigh Holmstedt and our alumni secretary, Mr. James Farmer for making my presence here on this platform possible.

When Mr. Farmer invited me to speak here, I asked him what I should talk about. He replied, "About twenty minutes." This was quite agreeable to me, as I do not believe there are very many souls saved after the first twenty minutes of a sermon.

At the risk of being somewhat trite, I believe it is well to review a bit of the history of Indiana State, because every Founders' Day should have something about the founding and early days of the institution. I hope this may be done every year so that each succeeding generation of students will become familiar with the founding facts and know something of the past of this institution of higher learning. None of you will remember very long what I have to say about the founding of Indiana State, but it will help to make indelible in

your mind the impressions about dates, when it was founded, and some of the facts therewith.

It takes more than one telling to get folks to remember things you



T. R. JOHNSTON

want them to remember just is it does in teaching. The story has to be told and retold in different fashion if we are to get the lasting impression that we all want. This calls to my mind an old saying that I've often used in talks to Indiana teachers, county agents, and our own staff members at Purdue:

"The constant drip of water wears away the hardest stone;

"The constant gnaw of Towser masticates the hardest bone."

I've used this simple illustration time and again in trying to get adult students in public relations, news writing and radio broadcasting classes out over the state to remember the value of repetition in getting their ideas across to the public. So, I give it to you today for what it may be worth.

Ever since my own student days here, I've remembered that Indiana State Normal actually opened in 1870. That date evidently was drilled into my mind so well that it has stuck there through the years. Why, I do not know, but it has.

Actually, it was December 20, 1865 that the Indiana General Assembly passed an act providing for the founding of a teacher training institution. A little more than four years later, on January 6, 1870, class work began with an enrollment of 21 students, so actually the college began its 89th year yesterday.

Anyone who went to college back in those days was a brave young person. Relatively few went to high school and only the most daring attended college. So all of us can imagine the students of 1870, girls with high button shoes, dresses that reached to the ground, huge mutton leg yokes in the shirt-waist sleeves, tiny hats or bonnets that preceded the merry widow sailors of the gay nineties. Also, from photographs in my own office, I can imagine the young men budding teachers, wearing high shoes, some of them laced, but mostly with buttons cutaway or long frock coats, high collars and top hats.

Picture in your mind's eye what a class was like back in 1870 in contrast with those of today.

the last 10 years in spite of eight wage increases and rising material costs.

Mechanization has made great progress. With the aid of giant machines the American coal miner produces over 10 tons per working day in all mines. This is more than twice as much as he produced in 1942.

This country has more bituminous coal than any other nation and more industry to use the coal. About 2 trillion tons of coal lie in America's rich reserves, an estimated 34 per cent of the world's known deposits, or enough to last the nation hundreds of years.

Perhaps the most dramatic visible change in the coal industry has been the advent of giant machines which have almost pushed the pick and the pit pony into oblivion. This intensive mechanization has taken place not only at the mine but also in the processing and preparation plant, in storage facilities and on to the grate where coal is burned. The industry has exerted every effort to make coal do a more efficient, economical job for the consumer.

Underground, where 73 per cent of America's coal is still mined, strange menagerie of machines has replaced most of the old fashioned muscle in all but some smaller mines. Some of the nation's coal is still loaded by hand, but the quantity of this hand-produced coal is decreasing rapidly. About 85 per cent of the underground coal production is produced by machinery. This coal is mechanically loaded by mobile machines which scoop up the loose coal with a pair of steel arms and pass it over their backs by built-in conveyors to moving belts or shuttle cars.

Another 11 per cent of the underground output is produced by continuous mining machines, the most marvelous of all the industry's subterranean monsters. These machines of several types, eliminate the separate steps of cutting, drilling, blast-

ing and loading. The continuous miner has multitoothed cutting heads by which it eats its way into the coal seam, tearing loose the coal and passing it to the rear of the machine where it is transferred to conveyor belts or loaded into shuttle cars for movement to the surface by mine cars. These machines can mine up to eight tons of coal per minute.

Surface mining, also called strip or open pit mining, has increased rapidly since World War II and now accounts for one quarter of U. S. coal production. Since it uses the largest mobile machines on earth, output per man day is more than double that in the underground mines.

Strip mining is feasible only when coal seam is relatively close to the surface of the ground. Two basic steps are involved, removing the soil and rocks above the coal seam, and the loading of the coal onto trucks for transfer to the preparation plant.

The job of removing the dirt and rocks above the coal falls to giant power shovels and draglines. One of the largest shovels weighs 6,000,000 pounds and digs out a 105 ton bite or 70 cubic yards of earth and rock every 50 seconds, uncovering coal at a rate of 2 million tons a year. Its boom towers 150 feet above the base of its four 22 foot crawler treads, and its three story cab, 58 feet long, is so big it has its own passenger elevator. One man controls the motion of this gigantic machine from an air-conditioned cab.

When the coal seam is exposed by the big shovels, its surface is cleaned by scrapers, rotary brushes and other highway-type equipment. The coal is then loaded into trucks by smaller power shovels, of the size used in ordinary construction work. Some mines use special off-highway trucks of up to 80 tons capacity.

Strip mining is no small job. The overburden at U. S. strip operations averages more than 41 feet in depth. The seam uncovered averages about 5 feet thick. Enough overburden is

moved to fill up the Panama Canal five times a year.

Auger method is a third method of coal production which was recently developed as an offshoot of contour strip mining and to increase coal recovery. Often in hilly areas the coal seam continues under overburden too thick for profitable removal. After the final stripping cut in the open mine leaves the face of the seam exposed, huge augers, from 16 to 72 inches in diameter, bore horizontally into the seam as far as 200 feet. The loosened coal flows out along the auger and onto a conveyor which dumps it into a truck. The augers are mounted on a movable frame which moves down the high wall from hole to hole. Though sites for auger mining are limited, productivity is some 17 per cent higher than in strip mining and three times the underground average. Only a few hundred augers are in operation but they produce nearly 25 tons per man per day. Only about two per cent of U. S. coal is produced by augers.

Not much coal is sold in "run of mine" form as it comes out of the earth a mixture of sizes from large chunks to fine powder. Most raw coal is sorted for size through a series of screens, and more than 58 per cent of the nation's coal output goes through cleaning plants where free slate, clay and other impurities are removed.

These huge modern plants, many with push-button control, tailor coal to fit customer's needs. Coal is less dense than the impurities which are mined with it. In the so-called wet process of cleaning, the coal floats as the refuse sinks. In the dry cleaning process, air currents are used instead of water. More than 18 per cent of the tonnage entering coal cleaning plants is rejected as refuse.

Some 34 per cent of the nation's coal production is crushed to reduce it to more usable sizes. Before leaving the preparation plant, the coal may also be treated with oil or calcium chloride to allay dust.

training of teachers and administrators in the ever widening field of education as illustrated in its growth and development under Dr. Tirey the last 20 years and Dr. Holmstedt the last 5 years. Each and every person in this room should have great pride in being a part of this institution. I personally shall always cherish my days here and my degree from Indiana State.

Have you ever stopped to think of the real significance of the profession of teaching. It is the most important of all among the learned professions. Without the teacher where would the other professions be. Without teachers it wouldn't take many years till we ran out of lawyers, doctors, ministers, engineers, artists—every learned group. Back of ALL the students in any field of knowledge must be a teacher and if these professions and others as well are to measure up to their places in society, their teachers must be good.

We at Purdue have always recognized the high standards of Indiana State Teachers College. We have respected this institution for the quality of its instruction; its good management and sound progressive policies that have prevailed through the years. We have recognized the existing merit that has achieved the standing of Indiana State and brought renown to Indiana State Teacher's College. I personally am familiar with the achievements of the Parsons, Hines, and especially the outstanding records of the Tirey and Holmstedt regimes. Each and every person here and every Indiana State man or woman anywhere can and should be proud of the records of achievements that have contributed to that standing.

Last month at the Land Grant College Association meeting in Washington, I heard a talk on the characteristics of a good teacher by a philosophy instructor from Rutgers University, Dr. Houston Peterson, who spoke before the residence instruction division. Dr. Peterson, a

unique character himself, laid it on the line and drew the attention of the educational editors of such papers as the New York Times, the New York Herald Tribune, the Washington Star and other large and influential newspapers.

Contagious enthusiasm for his subject stood first on Dr. Peterson's list of desirable attributes of a good teacher. He said contagious enthusiasm requires range and scope and may run the gamut from "jackass to genius."

Knowledge of subject, he admitted, is of great importance in a teacher, but Dr. Peterson placed this second, and said "It won't do much good if the student is asleep."

Effective communication he rated third place, but he emphasized he didn't mean an over-simplification or watered down presentation that students might absorb in relaxed ease.

Fourth on his list of great teacher characteristics was the ability to "carry students" beyond the boundary of the classroom or campus.

Acknowledging that an ideal is not always readily attainable, and that not all teachers might possess all of his listed characteristics, Dr. Peterson, with a trace of whimsy, said he would accept a teacher who possessed "just one or two" of them. I doubt if Indiana State would be quite as easy as this Rutgers professor.

You may or may not agree with Prof. Peterson on his four points for a good teacher, or you may want to rank them differently. I hope however, that you will think about them and set your own slide rule for good teaching. With the present discussion over Indiana about the importance of educational courses and methods versus subject matter in teacher training, I think it's high time that those of us in all education agree upon a general policy of just what is best or most desirable and then push toward that goal, whether we are trained for elementary school, secondary school or college level teaching.

Looking at the entire field of education and I've had that opportunity over a good many years, I see the need for complete cooperation between the universities, and teachers' colleges and the secondary and elementary teachers and administrators. After all, education—our common aim—is the basis of a successful democracy. Each and every one of us has a part in the training of individuals who are the ultimate consumers of what we have to offer. There is no competition between the school and colleges whether public or private as some would have us believe. Each has its part in the total educational scheme for the state and nation.

Those of us fortunate enough to have degrees from Indiana State or to be students in this institution, can offer our thanks to the Supreme Being every day for that privilege and to pledge anew our faith as teachers or administrators or as men and women to do the work we seek to do. Let us ever remember that we represent the highest profession and keep alive the ideas and ideals that must prevail in the great process of learning and education for the children and youth of the nation.

Likewise in our loyalties to Indiana State, let us resolve on this Founders Day to know the many things that have been done the last 25 years, what we are doing now as an institution not only on an instructional but also on an extension or correspondence basis. With space flights and trips to the moon in the offing and the tremendous development of new knowledge, the opportunities that lie ahead for Indiana State, yes for all other wide awake institutions of higher learning, are unlimited. I'd like to come back in another 89 years and see the changes. In this total educational picture the teacher must be the key individual. Your individual opportunities are boundless. Indiana State, with its proud record, has unlimited possibilities in the days and years ahead. You know and I know that she will measure up.

As I reviewed the college history, I noted that Indiana State has had only seven presidents during almost a century of existence, certainly a tribute to the stability of this institution of higher learning. The first was William A. Jones, 1869-79; George P. Brown, 1879-1885; William Wood Parsons, 1885-1921; Linneus N. Hines, 1921-1933; Lemuel A. Pittenger, 1933; my good friend, Dr. Ralph N. Tirey, 1934-1953; and our present leader, Dr. Holmstedt who has called the plays here since 1953 in most effective fashion.

It was first a two year and then a three year course and finally a four year course of study. In 1907, the College was authorized to grant the baccalaureate degree. In 1929, legislative action changed the name from the State Normal School to Indiana State Teachers College.

When I came to the campus Sept. 16, 1912, there were three buildings and the power plant; the old main building, an imposing structure of dark red brick, that stood just west of where the Student Union Building now stands. The library had recently been completed and was a source of pride with every student, and Normal High School building had been in use several years. Our Athletic field was Parsons Field for baseball and track. It was located along the Big Four railroad in the West end of Terre Haute. Basketball and gymnastics were in the basement of the Administration building. Our annual cross country race with Rose Poly always ended down on Wabash Avenue and often there was a good fight between the two student bodies as the runners came down the home stretch.

As a reporter and later sports editor of the Terre Haute Star, I called at President Parsons' office almost every day in the search of news. Through my frequent visits with Dr. Parsons, Vice-President Howard Sandison, Registrar Minnie Hill and others on the staff, I really kept in touch with college activities and stu-

dent affairs. I also found time to take part in student activities, serving as treasurer of the athletic association, as president of my college course class one term, and in various other campus offices—but too often my grades suffered.

As I sat musing a few evenings ago and thinking what I might say today, there came to my mind many faculty members of 45 years ago whose classes and associations have meant much to me down through the years of a very active life. One of them was Prof. Victor Miller, of the English department, who encouraged me to attend Indiana State. He had been my English instructor in high school. Others were Dr. John Wisely with his unusual method of teaching grammar; Dr. W. O. Lynch, a close friend and advisor of many years and who passed away only last year; Dr. Frank Smith Bogardus, who now has a distinguished son on the faculty at Purdue; Dr. William A. McBeth, Dr. Frederic Mutterer, teacher of German; Prof. M. L. Laubach, Prof. Charles Roll, Prof. O. L. Kelso, Prof. James H. Baxter, Prof. R. G. Gillum, Prof. M. O. Cox, Prof. Rose Cox, Prof. Frank Higgins, Dr. Fred Donaghy, Prof. Mary Moran, Prof. Charles M. Curry, Dr. L. J. Rettger, Prof. F. M. Stalker, Prof. Charles B. Bacon, Prof. William Turman, Prof. Roscoe Hyde, Prof. Frederick L. Weng, Dean of Women Charlotte Schweitzer Burford and many others. These names today mean little to you but they meant a great deal to those of our generation.

It is easy to delve into the past but I would hesitate and I am not qualified to enumerate the many great teachers on the faculty of Indiana State today, but I can, however, make this statement to the faculty that many of you will live long in the hearts and minds of your students for the inspiration and information you contribute toward their development as mature man and woman. And to the students—you may not think now of it in this fashion—but

as the years roll around, you will reach back into your minds and recall this incident or that in class room and laboratory, this talk or an examination, believe it or not, that meant much to you in your chosen work. All will influence your lives as a whole not only as teachers, but as citizens.

I've always said that the best advertisement of any firm or institution was its product. This is true whether it be a university, a college, a farm or a manufacturing or business firm.

In looking through a 1947 history of Indiana State covering the period of 1865 to 1945, I found a veritable "who's who" in education in the listing by the author of this volume, my beloved friend, Dr. Lynch, of some of the Indiana State graduates and former students who had gone places educationally. There were literally hundreds of names from the earliest days of the institution down to 1947, the year the volume came from the press. Almost forty pages were needed to list the Indiana State men and women in college and University teaching or administrative positions or heads of city or county school systems.

Seventeen were listed as college presidents, among the best known being Dr. Lotus D. Coffman, who served for some years as president of the University of Minnesota and Elmer D. Bryan for many years president of Colgate. Dr. Frank C. Hockema, a classmate of mine, who began his formal college work here, was vice-president of Purdue for many years, holding that post at the time of his death three years ago. Dr. Wendell W. Wright, an Indiana State graduate, is head of the department of education and vice-president of Indiana University.

So it goes. I could use an hour or two telling the stories and naming others. Indiana State graduates are known far and wide for their work in the field of education. This is as it should be. This is an institution second to none devoted to the

How far the public institutions can go depends largely on the Indiana Legislature, as all four, Indiana State, Ball State, Purdue, and Indiana universities are creatures of the state. Within my own knowledge covering more than 40 years, Indiana State presidents have always presented in a fine way to the Legislature the financial needs of this institution. Dr. Tirey, our beloved president emeritus, made a great record before the state budget committee and legislatures as a whole, and Dr. Holmstedt and his aids are doing an excellent job in this direction now. All higher education has had a friendly legislature in Indiana. Such men as Representatives Walter Maehling, Birch Bayh, speaker of the House of Representatives this session, and now your own Prof. Dewey Annakin, in the State Senate, and others from Terre Haute,

have always supported this institution in a wonderful way, evidenced by the campus developments really started under the presidency of Dr. Tirey, and being continued on an even bigger scale under Dr. Holmstedt.

Too many of us, perhaps, are inclined to think of Founders Day only in the terms of the past. It seems to me it should be a Day when we pay honor to those of the past but it should be a time when we take stock of this past in terms of what it means in the present. We are proud of the past record of our college, proud of those who have contributed to its success, proud to accord them the honor that is due, but it is also a time when we of the present should be dedicated a little more "to the unfinished task that those whom we

honor have thus far so nobly advanced".

It should be in part *their* day but even more important, it should be *our* day.

It is a day when we must recognize that there is no past, no present and no future entirely as such—they are all just parts of time. There is no end to the works of man as typified in our Indiana State Teachers College—it goes on and on. There can be an end only if we of the present or those of the future permit that end to come.

So while Founders Day is a day of memories, it should also be a day of dedication. Each of you as students, each of you as members of the administrative and teaching staffs and each of us as alumni have a role to play—it is up to us to play it to our greatest ability.

